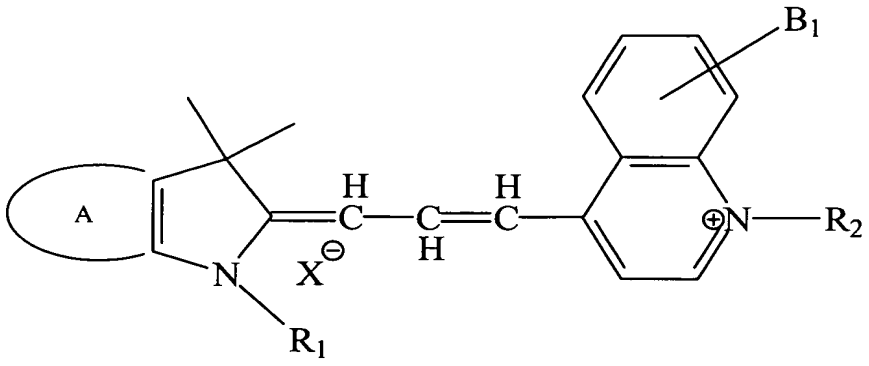
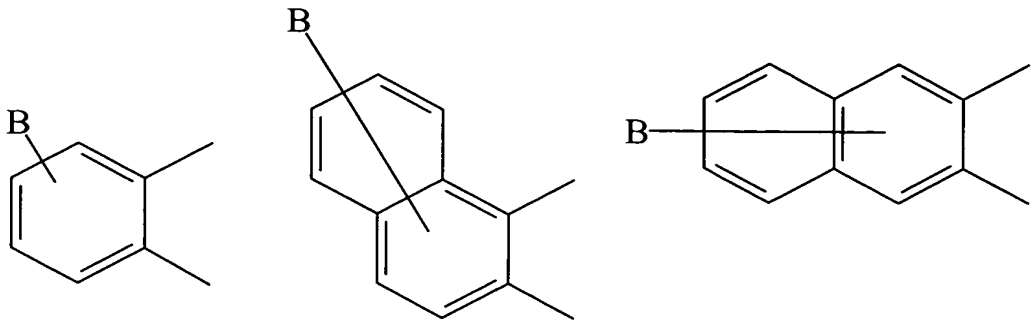
WHAT IS CLAIMED IS:

1. An optical recording medium dye, wherein the optical recording medium dye has a structure of:



wherein A is a functional group selected from the group consisting of an aromatic compound and a polycyclic aromatic compound; B_1 is a functional group selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkyloxy group, a halogen, a nitro group, a nitroso group, a substituted amine group ($-NR_2$, NHR), an unsubstituted amine group ($-NH_2$), a substituted sulfamoyl group (SO_2NR_2/SO_2NHR) and an unsubstituted sulfamoyl group (SO_2NH_2); R_1 and R_2 are functional groups selected from the group consisting of one of a same and a different, one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, alkenyl group, aralkyl group, alkoxycarbonyl group, alkoxycarboxyl group, alkoxyl group, alkyl hydroxyl group, alkylamino group, alkylcarbamoyl group, alkylsulfamoyl group, alkalkoxyl group, alkyl halide group, alkylsulfonyl group and alkylcarboxyl group; and X^- is an anion.

2. The optical recording medium dye of claim 1, wherein the functional group A in the structure has a structure (3), a structure (4) or a structure (5)



wherein B is a functional group selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkyloxy group, a halogen, a nitro group, a nitroso group, a substituted amine group (-NHR/NR_2), an unsubstituted amine group (-NH_2), a substituted sulfamoyl group (-SO_2NHR/SO_2NR_2) and an unsubstituted sulfamoyl group (-SO_2NH_2).

3. The optical recording medium dye of claim 2, wherein the substituted amine group (-NHR/NR_2) is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

4. The optical recording medium dye of claim 2, wherein the substituted sulfamoyl group is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched chain alkyl

group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

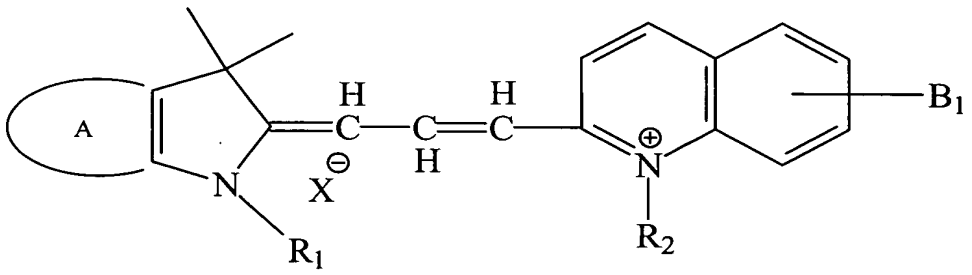
5. The optical recording medium dye of claim 1, wherein the halogen is selected from the group consisting of a fluoride, a chloride, a bromide and an iodide.

6. The optical recording medium dye of claim 1, wherein the substituted amine group (-NHR/NR_2) substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

7. The optical recording medium dye of claim 1, wherein the substituted sulfamoyl group is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched chain alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

8. The optical recording medium dye of claim 1, wherein X^- is an anion of an acid selected from the group consisting of a fluoric acid, a chloric acid, a bromic acid, an iodic acid, a perchloric acid, a periodic acid, a phosphoric acid, a phosphoric acid hexafluoride, an antimony hexafluoride, a tin acid hexafluoride, a fluoroboric acid, a thiocyanic acid, a benzenesulfonic acid, a p-toluenesulfonic acid, an alkylsulfonic acid, a benzenecarboxylic acid, an alkylcarboxylic acid, a trihaloalkylcarboxylic acid, a trihaloalkylsulfonic acid, a nicotinic acid and a thiocyanate (SCN^-).

9. An optical recording medium dye, the optical recording medium dye comprise a structure (2)

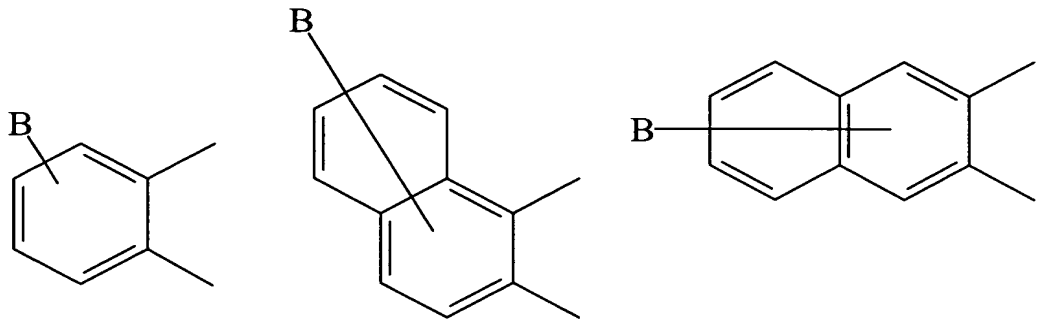


(2)

wherein A is a functional group selected from the group consisting of an aromatic compound and a polycyclic aromatic compound; B_1 is a functional group selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkyloxy group, a halogen a nitro group, a nitroso group, a substituted amine group (-NHR/NR_2), an unsubstituted amine group (-NH_2), a substituted sulfamoyl group (SO_2NHR/SO_2NR_2) and an unsubstituted sulfamoyl group (SO_2NH_2); R_1 and R_2 are functional groups selected from the group consisting of one of a same and a different, one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, alkenyl group,

aralkyl group, alkoxycarbonyl group, alkoxycarboxyl group, alkoxyl group, alkyl hydroxyl group, alkylamino group, alkylcarbamoyl group, alkylsulfamoyl group, alkalkoxyl group, alkyl halide group, alkylsulfonyl group and alkylcarboxyl group; and X^- is an anion.

10. The optical recording medium dye of claim 9, wherein the function group A in the structure (2) has a structure (3), a structure (4) or a structure (5)



(3) (4) (5)

wherein B is a functional group selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkyloxy group, a halogen, a nitro group, a nitroso group, a substituted amine group ($-NHR/NR_2$), an unsubstituted amine group ($-NH_2$), a substituted sulfamoyl group ($-SO_2NHR/SO_2NR_2$) and an unsubstituted sulfamoyl group ($-SO_2NH_2$).

11. The optical recording medium dye of claim 10, wherein the substituted amine group ($-NHR/NR_2$) is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl

group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

12. The optical recording medium dye of claim 10, wherein the substituted sulfamoyl group is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched chain alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

13. The optical recording medium dye of claim 9, wherein the halogen is selected from the group consisting of a fluoride, a chloride, a bromide and an iodide.

14. The optical recording medium dye of claim 9, wherein the substituted amine group (-NHR/NR_2) is substituted with a functional group selected from the group consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

15. The optical recording medium dye of claim 9, wherein the substituted sulfamoyl group is substituted with a functional group selected from the group

consisting of one of a substituted and an unsubstituted, straight chain alkyl group, branched chain alkyl group, cycloalkyl group, alkoxy group, alkyl carbonyl group, straight chain alkenyl group, branched chain alkenyl group, cycloalkenyl group, hydroxyalkyl group, alkoxycarbonyl group, alkoxycarbonylallyl group, alkylthio group, alkylsulfonyl group, aryl group and heterocyclic group.

16. The optical recording medium dye of claim 9, wherein X^- is an anion of an acid selected from the group consisting of a fluoric acid, a chloric acid, a bromic acid, an iodic acid, a perchloric acid, a periodic acid, a phosphoric acid, a phosphoric acid hexafluoride, an antimony hexafluoride, a tin acid hexafluoride, a fluoroboric acid, a thiocyanic acid, a benzenesulfonic acid, a p-toluenesulfonic acid, an alkylsulfonic acid, a benzenecarboxylic acid, an alkylcarboxylic acid, a trihaloalkylcarboxylic acid, a trihaloalkylsulfonic acid, a nicotinic acid and a thiocyanate (SCN^-).

17. An optical recording medium, comprising:

a first substrate, which is a transparent substrate comprising a signaled surface;

a recording layer, covering the first substrate, wherein the recording layer is formed comprising at least an optical recording medium dye as in one of claims 1 to 16; and

an anti-reflection layer, covering the optical recording layer.

18. The optical recording medium of claim 17, wherein the medium further comprises a second substrate, disposed on the anti-reflection layer.

19. The optical recording medium of claim 17, wherein a material for the anti-reflection layer is selected from the group consisting of gold, silver, aluminum, copper, silver-titanium alloy, silver-chromium alloy and silver-copper alloy type of metal and other alloy material.

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20. The optical recording medium of claim 17, wherein a material for forming the first substrate and the second substrate is selected from the group consisting of polyester, polycarbonate (PC), polymethylmethacrylate (PMMA) and a metallocene catalyzed cyclo olefin copolymer.